

23 December 2022

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Essential Services Commission
GPO Box 2605
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Submission via email: escosa@escosa.sa.gov.au

Dear Mr Glabadanidis,

Re: Discussion Paper: Tarcoola to Darwin rail infrastructure: Review of asset valuation methodologies periodic revenue reviews

Pacific National appreciates the opportunity to respond to the Essential Services Commission of South Australia (ESCOSA) Tarcoola to Darwin rail infrastructure: Review of asset valuation methodologies Discussion Paper.

Pacific National currently undertakes 'hook and pull' operations on the Tarcoola to Darwin line on behalf of Journey Beyond Rail Expeditions. Consequently, Pacific National has an interest in asset valuation methodologies that could be adopted for the purposes of reviewing the revenues earned by the access provider of below-rail services between Tarcoola and Darwin.

The Tarcoola to Darwin access regime under the AustralAsia Railway (Third Party Access) Code (Code) sets out a negotiate-arbitrate framework for access to below-rail services, with dispute resolution processes and arbitration available if negotiations fail. Pacific National understands that the outcomes of this review will only impact revenue reviews for mining services.

Clause 50 of the Code requires ESCOSA to review below-rail freight revenues where no sustainable competitive prices exist, and determine whether 'excessive' revenues have been earned. The Commission has previously found that passenger services and intermodal freight on the Tarcoola to Darwin line do face a sustainable competitive price, and it is only the rail transport of mineral ore that does not.¹ Accordingly, the asset valuation recommendations made by Pacific National in this submission only relate to the rail transport of mineral ore on the Tarcoola to Darwin line.

Pacific National's submission addresses each of the eight consultation questions and we appreciate the work ESCOSA has done in considering various asset valuation methodologies. Pacific National wants the outcome of this work to support reasonable access charges, and prudent investment that maximises use of the asset and fosters resilience of the network. It is also important that regulatory settings deliver certainty for access seekers and promote harmonisation across networks.

Pacific National supports a continuation of depreciated optimised replacement cost (DORC) as the preferred valuation method on the Tarcoola to Darwin line. Most Australian state regulators, as well as the Australian Competition and Consumer Commission (ACCC), use DORC to value rail infrastructure assets. DORC is also widely used in other asset classes, and it is reasonable for rail to aim to harmonise with other regulated classes. In circumstances where there

¹ Nera Economic Consulting, Asset valuation methodologies for the Tarcoola to Darwin Railway – Discussion Paper prepared for Essential Services Commission of South Australia, October 2022 p6

is no or limited competition, DORC appropriately balances the interests of access seekers and access holders.

As a general principle, stability of pricing, and terms and conditions, allows access seekers to provide customers with greater certainty that their requirements can be met over reasonable timeframes, with predictable and transparent pricing. The Discussion Paper notes that available information is not strongly supportive of any one type of asset valuation methodology. This would suggest that any benefits that may accrue to a methodological change would be marginal and would not outweigh the risk and cost of increased regulatory uncertainty associated with changing the asset valuation process.

Each of the valuation methods outlined in the Discussion Paper (DORC, depreciated historic cost (DHC) and market value) have some limitations, but DORC is the methodology most likely to incentivise efficient outcomes across the broader rail network:

- Harmonisation
 - Pacific National supports a consistent approach across networks nationally. This is particularly important for national operators and customers.
- Certainty for stakeholders
 - Stability and price certainty enables the access provider and access seekers to invest with confidence, including investment in more efficient assets and new technology.
- Prudent costs and investment
 - It is important that regulatory settings provide assurance that costs are prudent and incentivise prudent investment that maximises network utilisation and fosters resilience of the network.
- Sustainability
 - The regulatory framework should deliver a network that is fit for purpose and sustainable into the future.

Our consultation responses are attached, and we trust you find them useful in informing your review. If you wish to discuss the contents please contact Pacific National's Head of Strategic Access, Heidi Bailey Powell, on 0409 034 834 or at Heidi_BaileyPowell@pacificnational.com.au.

Yours sincerely,



Andrew Thomson
Chief Commercial Officer – Pacific National

Discussion of Consultation Questions

Consultation question

To what extent might a DORC methodology be appropriate?

The Tarcoola to Darwin access regime under the AustralAsia Railway (Third Party Access) Code (Code) sets out a negotiate-arbitrate framework for access to below-rail services, with dispute resolution processes and arbitration available if negotiations fail. The Code does not specify that a review of revenues must utilise depreciated optimised replacement cost (DORC) methodology, but it is the method the Essential Services Commission of South Australia (ESCOSA) currently use. DORC is also the methodology mandated for arbitration.

Consistent with regulatory precedent in other Australian regulated rail networks, Pacific National supports ESCOSA continuing to use DORC as the preferred valuation method.² In circumstances where there is no or limited competition, DORC appropriately balances the interests of access seekers and access holders.

The Code mandates the use of DORC in the event of an arbitration, and DORC was adopted by the Commission in previous reviews of revenues. The use of DORC for the Tarcoola to Darwin line therefore delivers regulatory certainty.

There is an expectation that DORC would continue to be used. It is reasonable to assume that the current DORC valuation methodology would have formed part of the revenue assumptions during the recent sale process for the Tarcoola to Darwin line. As shown in Table 1, the DORC methodology is used in most Australian rail networks. DORC is also widely used in other Australian asset classes such as electricity, gas and water, and it is reasonable for rail to harmonise with other regulated classes unless there are compelling, countervailing reasons.

Table 1: Rail in Australia: Asset valuation and cost allocation

Regulator & firm	Method used and regulator reasoning
<p>ARTC interstate network ACCC</p>	<p>Currently uses DORC that was estimated in 2008.</p> <ul style="list-style-type: none"> • However, there is currently a consultation on alternatives to DORC given that DORC value is likely to include non-commercial assets (assets that an efficient commercial operator would not have invested in). The concern is that by including non-commercial assets to DORC, this implies high ceiling limits, which would allow ARTC to significantly increase prices in the future and earn a return on historical non-commercial assets. • Government contributions are excluded from RAB except if the rail owner was required to earn a commercial return on that funding. • Cost allocation by segment

² Under this approach regulated assets are valued by calculating the replacement cost of an 'optimised' network. DORC is the total cost of constructing a modern equivalent asset today from scratch. This total cost is then depreciated to match the remaining useful life of the existing asset. ESCOSA, Tarcoola to Darwin rail infrastructure: Review of asset valuation methodologies for periodic revenue reviews discussion paper, November 2022 pp5-6

<p>Western Australia Economic Regulation Authority Western Australia.</p>	<p>Currently uses Gross replacement value (GRV): Sets the whole life average annual capital cost as if the infrastructure service was provided by assets that would be used if the network was constructed today, with operating and maintenance costs also set on this assumption.</p> <ul style="list-style-type: none"> • However [the ERAWA] is considering a change from GRV to DORC because the regulator believes that DORC better reflects what would be achieved in a competitive market. If they do move to DORC, they would apply back, tilted depreciation for railway owners that invested on the assumption of GRV and couldn't obtain the benefits of DORC from the beginning of their asset's life. • Government contributed assets are included in the cost of capital for the purpose of calculating the GRV and total cost. The value of an asset will be accounted for as an equivalent annuity payment which is to be included in the revenue earned on the asset for the purpose of the ceiling price test.
<p>New South Wales IPART NSW</p>	<p>Currently uses DORC.</p> <ul style="list-style-type: none"> • However, once the ACCC makes a decision on whether or not to continue using DORC for the Interstate network, IPART will take into account that decision and may follow the decision made by the ACCC. • The current methodology includes assets that are funded from government grants. • They also apply economic depreciation based on an operating cost building block for rail access calculations.
<p>Queensland Queensland Competition Authority</p>	<p>Currently uses modified DORC for the West Morton rail line, and DORC for the Aurizon network.</p> <p>The QCA reasons that a traditional or standard DORC is not appropriate given there is no direct modern engineering equivalent to these assets and the assets were not built for the purpose for which they are used today. That is, building an asset to transport coal today would look very different from the current network. Therefore, QCA estimated the initial asset base excluding maintenance-intensive assets or assets that have exceeded their expected useful life. This resulted in an initial RAB of \$272.2m (July 2015), compared to \$471.5 million which was estimated using a standard DORC as calculated by Queensland Rail.</p>

Source: Nera Economic Consulting, Asset valuation methodologies for the Tarcoola to Darwin Railway – Discussion Paper prepared for Essential Services Commission of South Australia, October 2022 p31

A DORC methodology is appropriate for industries where there is a threat that the regulated business may use its monopoly position to set prices at a level that extracts a monopoly rent. No sustainable competitive prices exist for the rail transport of mineral ore on the Tarcoola to Darwin line,³ therefore DORC is a suitable valuation mechanism in this instance.

³ Nera Economic Consulting, Asset valuation methodologies for the Tarcoola to Darwin Railway – Discussion Paper prepared for Essential Services Commission of South Australia, October 2022 p6

Pacific National suggests that it would be premature for the Commission to change valuation methodologies now. Regulatory asset valuation is evolving and the ACCC are considering the appropriateness of DORC as part of their Interstate Undertaking review.⁴

Consultation question

Would a revaluation of DORC bring more clarity and net benefits compared with the use of the current DORC value? Should a one-off revaluation be utilised, or should periodic revaluations be utilised?

Pacific National considers a full revaluation is unnecessary. The DORC roll-forward approach that is currently used provides regulatory and process certainty for the access provider and access seekers. Rolling forward the asset value, with new assets added (based on actual costs tested for efficiency) and the value of existing assets depreciated, is consistent with the methodology used in other national and state jurisdictions.

There is significant cost involved in engaging expert consultations to undertake a revaluation. From a cost benefit perspective, a Tarcoola to Darwin DORC revaluation is unlikely to be justified. This was the rationale of the Commission in its 2015 ten-year review, that found the process of revaluing the DORC was costly and not likely to alter the outcome of the review.⁵

Additionally, Pacific National would not support a revaluation of DORC at this time given the ACCC has not finalised its position on the appropriateness of DORC with respect to the Interstate Network.

Pacific National notes that if a revaluation was to go ahead, the Commission should engage suitably experienced engineering and accounting firms to undertake the task, rather than rely on engineering and accounting consultants appointed by the access provider.

Consultation question

Are there factors that might allow for, or limit, the adoption of an asset valuation methodology other than DORC?

Several factors could impact the adoption of a non-DORC asset valuation methodology. These include regulatory precedent, practical considerations, and complexity and circularity issues associated with some other valuation methods.

As noted previously, most of the Australian rail networks and many of the non-rail regulated industries use DORC as the valuation method. DORC therefore provides a relatively consistent approach across networks. This aids harmonisation, which is particularly important for national operators and customers. There is an expectation that DORC would continue to be used and it is reasonable to assume that the recent sale of the Tarcoola to Darwin line would have been premised on the use of DORC as a valuation and revenue calculation method.

⁴ In July 2022 the ACCC published a guidance paper on the Interstate Undertaking that suggested it would accept a price control in the new undertaking that doesn't reference a regulated asset base (RAB) or DORC. The ACCC has signalled it will provide further discussion of DORC and alternatives in future.

⁵ ESCOSA, Tarcoola-Darwin railway: 10-year review of revenues – final report, August 2015 p36

The Code mandates the use of DORC in the event of an arbitration. This means that using a non-DORC methodology to review Tarcoola to Darwin revenues would create a discrepancy between what is defined as 'excessive revenues' for the purpose of a review, versus what is defined as 'excessive revenues' during arbitration. This would lead to unnecessary and avoidable regulatory complexity. It would also increase administrative overheads that would then need to be recovered from access seekers.

Some methods, such as depreciated historic cost (DHC), are simply not practical for valuing older assets. The Tarcoola to Alice Springs section of the Tarcoola to Darwin line was built more than 40 years ago and historic construction costs may be difficult to verify (this is discussed in the next consultation question response).

Certain valuation methods should be excluded from consideration because of valuation circularity issues that can arise when the asset value is used to derive a price. For example, a market value methodology can lead to circularity problems if a buyer values an asset based on the expected cash flows of the regulated asset base, which, in turn, are derived from the price paid for the asset.⁶ The market valuation method can have the effect of incentivising an investor to pay an excessive price for a network with the expectation that users will have no option but to pay higher access charges.

Consultation question

To what extent might a DHC methodology be appropriate?

The key limitation to adopting a DHC method for the Tarcoola to Darwin line is that it relies on having access to the historic cost of construction.⁷ While build costs may be available for the Alice Springs to Darwin section of the line (which was constructed in 2004), the Discussion Paper notes that the Tarcoola to Alice Springs section was built more than 40 years ago, and construction costs could be difficult to obtain.

Even if historic cost records were available, Pacific National would not support DHC as the preferred valuation methodology. DHC is a purely backward-looking measure, and it does not accurately consider the current and forward-looking costs of providing the service. Additionally, it may be the case that the historic build costs are higher (in real terms) than the costs with advanced building processes today would be.⁸ This means DHC would have the potential for higher ceiling limits for access charges.

The use of DHC would not support harmonisation across networks. DHC methodology is not used in Australian rail networks and is not widely used in other regulated Australian asset classes, except telecommunications.

⁶ ESCOSA, Tarcoola to Darwin rail infrastructure: Review of asset valuation methodologies for periodic revenue reviews discussion paper, November 2022 p8

⁷ Depreciated Historical Cost (DHC) measures whether the firm's earned revenues exceeded the required return on the original construction costs. It thus measures the return to the asset and to the original owner. Nera Economic Consulting, Asset valuation methodologies for the Tarcoola to Darwin Railway – Discussion Paper prepared for Essential Services Commission of South Australia, October 2022 p2

⁸ Nera Economic Consulting, Asset valuation methodologies for the Tarcoola to Darwin Railway – Discussion Paper prepared for Essential Services Commission of South Australia, October 2022 p17

Similar to the market valuation method, DHC can have the effect of incentivising economically inefficient expenditure in anticipation that users have no option but to underwrite it with their access charges.

Consultation question

To what extent might a market value methodology be appropriate? Should a line-in-the-sand be utilised and updated for each new market transaction, or should a line-in-the-sand be utilised with no further updates?

Pacific National does not consider market value to be an appropriate methodology. The market value is an asset's economic value recorded at the time a sale occurs i.e. the purchase price of the asset. Complications associated with the use of market value include valuation circularity, overbidding, and other issues associated with transactions in non-competitive markets.

Because market value can be impacted by extraneous political and economic factors, there are no safeguards to ensure that market valuation is based primarily on prudent costs. This can erode certainty for access seekers and lock in a non-competitive asset price that leaves access seekers underwriting the imprudent commercial choices of a purchaser.

Valuation circularity and overbidding

A market value methodology can create an incentive for the asset purchaser to overbid and pay too much for an asset, expecting they can recoup it later through higher access charges. This stems from a circularity problem that occurs because the asset purchaser anticipates that the purchase price will set the maximum ceiling price for access charges.

The purchaser expects that a higher market value will drive higher revenue and access charges, and is therefore willing to pay more to buy the asset.⁹ This inflates the asset price, since the purchaser expects they can exploit the higher purchase price to drive up access charges. Access seekers are left exposed to opportunistic purchasing behaviour and the asset valuation ends up overstated and not reflective of prudent costs.

Market Value may not be based on prudent costs

Pacific National considers that any process for valuing rail assets should be designed to minimise the risk of political and economic price shocks. Unfortunately, the market value of an asset can be shaped by factors unrelated to efficient costs, such as political uncertainty and domestic and global economic factors. This creates instability and pricing uncertainty for access seekers because there are no safeguards to ensure the asset valuation is primarily based on prudent costs.

If the price paid for an asset is materially misaligned to prudent costs, access seekers are left bearing the cost of it.

⁹ Nera Economic Consulting, Asset valuation methodologies for the Tarcoola to Darwin Railway – Discussion Paper prepared for Essential Services Commission of South Australia, October 2022 p3

Markets for ownership may be inefficient

The use of market value presupposes that markets for ownership are efficient, but this may not be the case. The market value is the purchase price of an asset. In a competitive market, one could expect the market value to track measures of cost.¹⁰ However, this is not the situation if the market for assets is limited. For example, there may only be two companies willing to bid for the purchase of a rail asset, so the price paid may differ from the price that would eventuate in a highly competitive market.

Harmonisation across networks

The use of market value would not support harmonisation across networks. Market value methodology is not used in Australian rail networks, nor is it used in other regulated Australian asset classes.

For the Tarcoola to Darwin rail line, Pacific National is agnostic on whether a line-in-the-sand market valuation should be utilised with no further updates, or instead updated for each new market transaction. Pacific National does not support market valuation for the Tarcoola to Darwin line and therefore does not support either approach.

Consultation question

To what extent might a change in asset valuation methodology impact stakeholders' perceptions of regulatory risk and fairness?

A change in asset valuation methodology, regardless of the new methodology chosen, can increase regulatory uncertainty. Regulatory risk increases when there is inconsistency, so the ideal is to have a regulatory framework that provides transparent and consistent methods to value assets, and recover access charges.

Stability of pricing, and terms and conditions, allows access seekers to provide customers with greater certainty that their requirements can be met over reasonable timeframes, with predictable and transparent pricing. Stakeholders need confidence to invest and have a right to expect regulatory consistency and an environment that incentivises prudent investment in the network.

In the case of the Tarcoola to Darwin line, the access provider and access seekers have invested in the network based on a pricing framework underpinned by a DORC asset valuation methodology. Any change from this creates uncertainty and could reduce incentives for future investment.

For the Tarcoola to Darwin network, the use of market value or DHC for asset valuation would create an inconsistency between the arbitration process methodology and the revenue review process. The Code mandates the use of DORC asset valuation in the event of an arbitration. The use of DORC in arbitration, but the use of a different valuation methodology (such as market value or DHC) to review revenue, would increase regulatory risk and complexity.

¹⁰ Nera Economic Consulting, Asset valuation methodologies for the Tarcoola to Darwin Railway – Discussion Paper prepared for Essential Services Commission of South Australia, October 2022 p12

The Discussion Paper notes that available information is not strongly supportive of any one type of asset valuation methodology. This would suggest that any benefits that may accrue to a methodological change would be marginal and would not outweigh the significant cost of increased regulatory uncertainty and risk associated with changing the asset valuation process.

Consultation question

To what extent might a particular type of methodology impact the asset valuation and hence results of a periodic review of revenues?

Each of the valuation methods outlined in the Discussion Paper (DORC, DHC and market value) have the potential for higher ceiling limits and access charges, although the risk is greatest with market valuation.

There are no safeguards associated with market value to ensure that the asset valuation is based on prudent costs. This can erode certainty for access seekers. It can also lock in a non-competitive asset price that raises the ceiling limit, which would allow the access provider to significantly increase access charges in the future. As noted previously, market value increases the risk of valuation circularity and can create a perverse incentive for a purchaser to overpay for an asset to affect higher access charges and boost revenue.

For the Tarcoola to Darwin network, the use of DORC to measure excess revenues in the event of arbitration, but use of a different asset valuation for periodic revenue reviews, would create complexity and inefficiency. It would increase administrative overheads that would then need to be recovered from access seekers.

For DHC and DORC specifically, DHC may inflate ceiling limits because it is based on original construction costs that could be higher (in real terms) than the cost of more efficient building processes today. Similarly, DORC may be inflated if the network includes government-funded assets that a commercial operator would not have constructed, or if sections of the asset have been over-engineered to a higher standard (because of government investment aimed at delivering social, non-commercial outcomes).

Consultation question

To the extent a change in asset valuation methodology is found to be appropriate, should the methodology be applied on a prospective or retrospective basis?

Pacific National is not advocating for a change in asset valuation methodology. Nonetheless, should a change occur we recommend it should be on a prospective basis.

The regulatory framework should be fair and minimise regulatory risk. Retrospectively applying a new methodology shifts the goal posts without giving stakeholders an opportunity to act differently in response to a change in methodology. Applying the method retrospectively to a period when stakeholders had a reasonable expectation that the previous method would be used, may increase perceptions of regulatory risk.¹¹

¹¹ Nera Economic Consulting, Asset valuation methodologies for the Tarcoola to Darwin Railway – Discussion Paper prepared for Essential Services Commission of South Australia, October 2022 p26